

Docket No.: CL-10274
Application No.: 10/813,943
Amendment Date: March 9, 2006
Reply of Office Action of: November 9, 2005

AMENDMENTS TO THE CLAIMS

Please cancel claim 2, and amend claims 1, 3-13 and 15 as indicated among the following complete set of pending claims:

Claim 1. (Currently amended) An emitter paste composition of a field emission cell, comprising 2 wt% to 20 wt% of a carbon nanotube, a binder, glass frit, a dispersing agent,[[and]] an organic solvent,[[wherein the emitter composition further comprises]] and 0.1 [[-]] wt% to 20 wt% of diamond, based on a weight thereof.

Claim 2. (Canceled)

Claim 3. (Currently amended) The emitter paste composition as defined in claim 1, wherein the binder is used in the amount of 40-70 wt%, based on the weight of the composition.

Claim 4. (Currently amended) The emitter paste composition as defined in claim 1, wherein the glass frit is used in the amount of 2-20 wt%, based on the weight of the composition.

Claim 5. (Currently amended) The emitter paste composition as defined in claim 1, wherein the dispersing agent is used in the amount of 1-5 wt%, based on the weight of the composition.

Claim 6. (Currently amended) The emitter paste composition as defined in claim 1, wherein the organic solvent is used in the amount of 1-5 wt%, based on the weight of the composition.

Claim 7. (Currently amended) The emitter paste composition as defined in claim 1, wherein the organic solvent is selected from the group consisting of terpineol, butyl carbitol acetate, butyl carbitol, and mixtures thereof.

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Claim 8. (Currently amended) The emitter paste composition as defined in claim 2, wherein the organic solvent is selected from the group consisting of terpineol, butyl carbitol acetate, butyl carbitol, and mixtures thereof.

Claim 9. (Currently amended) The emitter paste composition as defined in claim 3, wherein the organic solvent is selected from the group consisting of terpineol, butyl carbitol acetate, butyl carbitol, and mixtures thereof.

Claim 10. (Currently amended) The emitter paste composition as defined in claim 4, wherein the organic solvent is selected from the group consisting of terpineol, butyl carbitol acetate, butyl carbitol, and mixtures thereof.

Claim 11. (Currently amended) The emitter paste composition as defined in claim 5, wherein the organic solvent is selected from the group consisting of terpineol, butyl carbitol acetate, butyl carbitol, and mixtures thereof.

Claim 12. (Currently amended) The emitter paste composition as defined in claim 6, wherein the organic solvent is selected from the group consisting of terpineol, butyl carbitol acetate, butyl carbitol, and mixtures thereof.

Claim 13. (Currently amended) The emitter paste composition as defined in claim 1, wherein the diamond comprises powders each having a size not larger than 6 μm .

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Claim 14. (Withdrawn) A method of manufacturing an emitter composition of a field emission cell, comprising:

introducing a carbon nanotube, a binder, glass frit, a dispersing agent, and an organic solvent into a mixer, to obtain a first pre-mixture;

further adding 0.1-20 wt% of diamond, based on a weight of the composition, to the first pre-mixture, to obtain a second pre-mixture; and

stirring the second pre-mixture by use of a stirrer equipped in the mixer for 1-3 hours, to prepare a paste type mixture.

Claim 15. (Currently amended) The emitter composition as defined in claim 1, [[A field emission cell, comprising an emitter composition manufactured by the method of claim 9 and then]]printed to be a thick film in the field emission cell.